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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,656	07/13/2001	Sang IL Seo	0630 - 1284P	1832
2292	7590	12/27/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			NATNAEL, PAULO S M	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 12/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/903,656

**Applicant(s)**

SEO ET AL.

**Examiner**

Paulos M. Natnael

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,3 and 5-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3 and 5-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim **9-18** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

While the specification discloses that “a controlling unit 210 displaying the digital AV contents by controlling the MPEG decoder 220 while transmitting/receiving the data with the controlling unit 110 included in the signal output apparatus 100 and switching the video input terminal of the video display unit according to the decision of the path in the controlling unit 110 in OSD display mode” (page 5, specification), claim 9 recites “an analog transmission terminal, wherein when said first controlling unit judges that an OSD is needed, said first controlling unit checks a size of the needed OSD, compares a size of the needed OSD to a preset size, and based upon the comparison, transmits the OSD over one of the digital transmission terminal or the analog transmission terminal to a switching unit. It is not clear how the **analog terminal** which is seen to receive (in receiver unit 200) the analog signal transmitted through the analog channel, is also claimed as “wherein when said first controlling unit judges that an OSD is needed, said first controlling unit checks a size of the needed OSD, compares a size of the needed OSD to a preset size, and based upon the comparison, transmits the OSD over one of

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the digital transmission terminal or the analog transmission terminal to a switching unit."

In other words, it is not clear what the connection is, if any, between the analog terminal and the processing as claimed in claim 9, rendering the claim indefinite.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims **2,3,5-16** are rejected under 35 U.S.C. 102(b) as being anticipated by Carr et al., U.S. Patent No. 5,608,446.

Considering claim **2 (as amended)**, Carr et al disclose the following claimed subject matter, note;

a) judging whether a transmission of an OSD is needed or not, is met by Router **42**, fig.1;

b) if so, checking a volume of the OSD, is met by Control Processor **48**, fig.1;

c) determining whether a volume of the OSD is larger than a certain volume, and if so transmitting the OSD to a switching unit through an analog connection, and if the

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volume is not larger than the certain volume, transmitting the OSD to a switching unit through a digital connection, is met by the Control Processor **48**, as discloses on col. 8, lines 29-55 that "...The router transmits at least the packet header to control processor **48** which makes a determination of whether to have the information transmitted via the modem link over the public switched telephone network **24** or via the cable television distribution system utilizing the larger bandwidth channel carried by cable **36** to the user's customer premise equipment **20**. In the illustrative example, a determination is made that the relatively small amount of data would be most efficiently handled and bandwidth conserved by the system by routing it via the modem and PSTN network. .."

d) selecting and displaying one of either said digital AV contents or the OSD, is met by the customer premises equipment 20, fig.1;

Considering claim **3**, the method according to claim 2, wherein the digital AV contents are transmitted through a digital connection while the OSD is transmitted through the analog connection;

See rejection of claim 2(c).

Considering claim **5**, the method according to claim 2, further comprising, transmitting an indication signal to indicate whether the OSD is being transmitted through the analog connection, is met by the disclosure that "the router transmits at least the packet header to control processor **48**..."(col. 8, lines 41-42)

Considering claim 6, the method according to claim 5, wherein the transmission of the digital AV contents, the OSD and the indication signal are from a signal output apparatus, said method further comprising:

a) receiving the AV contents, the OSD and the indication signal at a signal input apparatus, is met by control processor 48, fig. 1.

b) processing the indication signal at the signal input apparatus to switch between a first input terminal for the analog signal and a second input terminal for the digital AV content, is met by control processor 48, fig. 1.

Considering claim 7, the method according to claim 2, wherein said step of judging whether a transmission of an OSD is needed or not, includes sensing a user's input requesting a setting status or command to change a control parameter, is met by the disclosure the user now transmits a specific request for information concerning the price and volume history of a stock for the past week. This request is transmitted through the public switched telephone network 24 and routed to enhanced service provider 10A through router 42 in the manner previously described. (col. 8, lines 29-34)

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Considering claim **8**, the method according to claim 7, wherein the user's input is received via a remote control, is met by the disclosure that the user now transmits [remotely] a specific request for information concerning the price and volume history of a stock for the past week. This request is transmitted through the public switched telephone network 24 and routed to enhanced service provider 10A through router 42 in the manner previously described. " (col. 8, lines 29-34)

5. For the purpose of this rejection the "an analog transmission terminal" is treated separately from the "wherein" clause that follows it, which appears to deal with both the analog and digital transmission terminal.

Considering claim **9, (as amended)** a system comprising a signal output apparatus including:

- a) an audio/video (AV) data source for transmitting digital AV content, is met by Enhance Service Provider 10A-10N, fig.1;
- b) an on screen display (OSD) generating unit for generating an OSD, is met by Enhance Service Provider 10A-10N, fig.1;
- c) a first controlling unit for controlling operation conditions of said AV data source and said OSD generating unit, is inherent in such systems which are controlled by a computer or microcomputer or personal computer.
- d) a digital transmission terminal connected to said AV data source, is met by telecommunication network, fig.1;

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e) an analog transmission terminal... is met by the cable distribution head end 30A-30N  
fig.1;

f) wherein when said first controlling unit judges that an OSD is needed, said first  
controlling unit checks a size of the needed OSD, compares a size of the needed OSD  
to a preset size, and based upon the comparison, transmits the OSD over one of the  
digital transmission terminal or the analog transmission terminal to a switching unit, is  
met by the control processor 48, fig.1;

g) the switching unit for selecting and displaying one of either the digital AV content or  
the OSD, is met the customer premises equipment 20, fig.1;

Considering claim 10, the system according, to claim 9, wherein if the size of the OSD  
exceeds the preset size, the OSD is transmitted over the analog transmission terminal;

See rejection of claim 2(c);

Considering claim 11, the system according to claim 10, wherein the digital AV contents  
are transmitted over the digital transmission terminal at the same time that the OSD is  
transmitted over the analog transmission terminal;

See rejection of claim 2(c);



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Considering claim **12**, the system according to claim 9, wherein if the size of the OSD does not exceeds the preset size, the OSD is transmitted over the digital transmission terminal;

See rejection of claim 2(b).

Considering claim **13**, The system according to claim 12, wherein the digital AV contents are transmitted over the digital transmission terminal at the same time that the OSD is transmitted over the digital transmission terminal;

See rejection of claim 2(c).

Considering claim **14**, the system according to claim 9, further comprising:  
a remote control, wherein said first controlling unit judges that an OSD is needed by sensing a user's input on said remote control;

See rejection of claim 8.

Considering claim **15**, The system according to claim 9, wherein said first controlling unit transmits an indication signal to indicate whether the OSD is being transmitted through the analog transmission terminal or the digital transmission terminal.

See rejection of claim 7.

Considering claim **16**, the system according to claim 15, wherein the indication signal is transmitted over the digital transmission terminal.

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See rejection of claim 7.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims **17 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr et al., U.S. Pat. No. 5,488,412.

Considering claim **17**, the system according to claim 15, further comprising:

a) a signal input apparatus physically separate from said signal output apparatus, is implied because an input has to be physically separate from output terminal or apparatus in any electronic system.

c) a second controlling unit for connection to said first controlling unit, is met by Personal Computer 74 and Home Controller 70, Fig.1;

Except for;

b) an MPEG decoder unit for connection to said digital transmission terminal;

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d) video processor connected to said MPEG decoder unit and said second controlling unit, wherein said second controlling unit receives the indication signal;

Regarding b) and d), Carr et al. do not specifically disclose an MPEG decoder; However, the examiner takes Official Notice in that it is notoriously well known to utilize an MPEG decoder in a TV broadcasting receiver such as the subscriber equipment 20 (Fig.1) of Carr et al to decode MPEG coded signals and, therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Carr et al by providing the well known MPEG decoder in order to decode MPEG encoded signals (since the Carr et al. system already is capable of receiving digital broadcast signals), thus, making the system more versatile, less costly overall, and a lot more useful to the subscriber.

Considering claim **18**, the system according to claim 17, wherein the second controlling unit controls said video processor to receive digital data from said MPEG decoder unit or analog data from said OSD generating unit of said signal output apparatus;

See rejection of claim 17 (b)-(d).

### ***Response to Arguments***

8. Applicant's arguments filed **7/13/04** have been fully considered but they moot in view of the new ground(s) of rejection.

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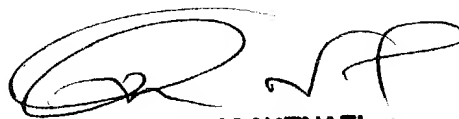
**Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PMN  
December 23, 2004



**PAULOS M. NATNAEL**  
**PATENT EXAMINER**